

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 (Currently Amended) A pattern forming method comprising:

forming a liquid-repellent thin film on an insulating surface;

irradiating a selected portion of ~~selectively providing affinity for liquid with a surface of the~~
liquid-repellent thin film with plasma from a first nozzle ~~by plasma-generating means so that the~~
selected portion has a liquid affinity; and

forming a pattern by ~~discharging~~ applying a liquid drop composition to the selected portion
from a second nozzle ~~surface having affinity of liquid of the thin film by drop-discharging means.~~

2 (Currently Amended). A pattern forming method comprising:

forming a thin film having an affinity for liquid on an insulating surface;

selectively forming a groove or a hole in a surface of the thin film by selectively treating the
thin film with a plasma from a first nozzle ~~plasma-generating means;~~ and

forming a pattern by ~~discharging~~ applying a liquid drop composition to the groove or the hole
in the thin film ~~by drop-discharging means~~ from a second nozzle.

3 (Currently Amended). A pattern forming method according to claim 1, wherein the liquid
drop composition is selected from the group consisting of a conductive material, a resist material, a
polymer material and a light emitting material.

4 (Original). A pattern forming method according to claim 1, wherein the liquid-repellent thin film is selected from the group consisting of a semiconductor film, a conductive film and a polymer film.

5 (Original). A pattern forming method according to claim 2, wherein the thin film having affinity for liquid is selected from the group consisting of a silicon oxide film, silicon nitride film, a silicon oxynitride film and a metal oxide film.

6 (Currently Amended). A pattern forming method according to claim 1, wherein the irradiation of the plasma is performed at a pressure each of the plasma-generating means and the drop discharging means is in a range of 1.3×10^1 to 1.31×10^5 Pa.

7 (Previously Presented). A pattern forming method according to claim 1, wherein a contact angle θ of the surface having affinity for liquid is $0^\circ \leq \theta < 10^\circ$, and a contact angle θ of the liquid-repellent surface is $10^\circ \leq \theta < 180^\circ$.

8-15 (Canceled).

16 (Currently Amended). A pattern forming method according to claim 2, wherein the liquid drop composition is selected from the group consisting of a conductive material, a resist material, a polymer material and a light emitting material.

17 (Currently Amended). A pattern forming method according to claim 2, wherein the treatment of the thin film with the plasma is performed at a pressure each of the plasma-generating means and the drop-discharging means is in a range of 1.3×10^1 to 1.31×10^5 Pa.

18 (Currently Amended). A pattern forming method according to claim 2, wherein a contact angle θ of the surface having affinity for liquid is $0^\circ \leq \theta < 10^\circ$, ~~and a contact angle θ of the liquid-repellent surface is $10^\circ \leq \theta < 180^\circ$.~~

19-22 (Canceled).

23. (New) A pattern forming method comprising:

irradiating a selected portion of a surface with plasma of a gas from a first nozzle so that the selected portion has a liquid affinity; and

forming a conductive pattern by applying a liquid drop composition to the selected portion from a second nozzle;

forming a mask pattern of a resist over the conductive pattern; and

forming a wiring by etching the conductive pattern using the mask pattern.

24. (New) A pattern forming method according to claim 23 wherein the gas is selected from the group consisting of He, Ne, Ar, Kr, Xe, oxygen, nitrogen and a combination thereof.

25. (New) A pattern forming method according to claim 23 wherein the mask pattern is

formed by applying selectively applying the resist to the conductive pattern through a nozzle.

26. (New) A pattern forming method comprising:

forming a groove in a surface by selectively treating the surface with plasma of a gas from a first nozzle; and

forming a conductive pattern by applying a liquid drop composition to the groove from a second nozzle;

forming a mask pattern of a resist over the conductive pattern; and

forming a wiring by etching the conductive pattern using the mask pattern.

27. (New) A pattern forming method according to claim 26 wherein the gas is selected from hydrogen, CF_4 , NF_3 , SF_6 , oxygen and a combination thereof.

28. (New) A pattern forming method according to claim 26 wherein the mask pattern is formed by applying selectively applying the resist to the conductive pattern through a nozzle.

29. (New) A pattern forming method according to claim 1, wherein the application of the liquid drop composition is performed at a pressure in a range of 1.3×10^1 to 1.31×10^5 Pa.

30. (New) A pattern forming method according to claim 2, wherein the application of the liquid drop composition is performed at a pressure in a range of 1.3×10^1 to 1.31×10^5 Pa.